

ABSTRACT

With an alkaline storage battery according to the invention, a coating layer of a cobalt compound is provided on the surface a cathode active material composed mainly of nickel hydroxide, and at least one species of compound selected from the group consisting of a niobium compound, titanium compound, tungsten compound and molybdenum compound is added to the coating layer of the cobalt compound while an alkaline electrolytic solution contains lithium hydroxide, and a lithium hydroxide content is not less than 0.6 mol / L and not more than 1.6 mol / L.

As a result, dissolution of the niobium compound, titanium compound, tungsten compound and molybdenum compound, in the alkaline electrolytic solution, can be inhibited and it becomes possible to maintain an excellent electrically conductive network. Consequently, even if recharge/discharge operations are repeated in a high-temperature atmosphere, it is possible to prevent deterioration of conductivity. Hence, an alkaline storage battery excellent in high-temperature cycle life can be provided.